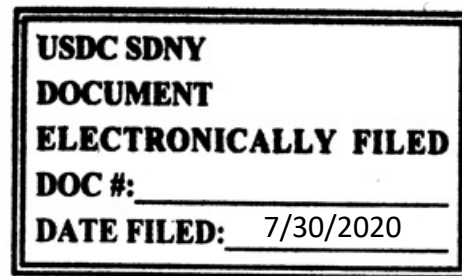


UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK



----- X
ALLIANZ GLOBAL INVESTORS GMBH, et. al.,

vs.

BANK OF AMERICA CORPORATION, et al.
----- X

1:18-cv-10364 (LGS)

**STIPULATION AND ~~PROPOSED~~ ORDER ESTABLISHING A PROTOCOL
FOR THE PRODUCTION OF DOCUMENTS AND
ELECTRONICALLY STORED INFORMATION**

Plaintiffs and Defendants in the above-captioned action (“Action”) hereby respectfully submit this stipulation and proposed order establishing a protocol for the production of documents and electronically stored information (“ESI”) in this Action (“Protocol” or “Order”), which binds all current and future parties and their counsel of record in this Action (each a “Party” and collectively, the “Parties”). The failure of this Protocol to address any particular issue is without prejudice to any position that a Party may take on that issue.

1. DEFINITIONS

1.1 “Action” means the above-captioned matter, and any and all cases consolidated or coordinated with it.

1.2 “Custodian” means the individual or originating source from which Documents or ESI will be collected.

1.3 “Document” and “Electronically Stored Information” (“ESI”) shall have the same meaning as the usage of these terms in Civil Rule 26.3(c)(2) of the Local District Rules and Federal Rule of Civil Procedure 34(a)(1)(A).

1.4 “Email” means an electronic means for sending, receiving, and managing communications via different applications (email client software), including, but not limited to, Microsoft Outlook, Google Gmail, Yahoo Mail, or Lotus Notes, and the file created or received by such means, though the inclusion of any platform, program, client, or software as an example herein will not obligate any Party to collect such ESI.

1.5 “Extracted Text” means the text extracted from an electronic Document, and includes all header, footer, and Document body information, including any hidden content, when available. A “Text File” is a file containing the full multi-page text of native or near-native files extracted directly from the electronic file, or, in the case of paper/hard copy Documents subject to OCR, a file containing the text resulting from the OCR.

1.6 “Instant Messages” means communications involving immediate correspondence between two or more users sent via chat client or SMS, including but not limited to, Bloomberg Chat, Reuters Messenger, Reuters Dealings, Google Talk, WhatsApp, Yahoo! Messenger, AOL Instant Messenger, Blackberry Messenger, ICQ, Pidgin, Line, Audium, Trillian, or any proprietary instant messaging system, though the inclusion of any platform, program, client, or software as an example herein will not obligate any Party to preserve or collect such ESI.

1.7 “Load File” means an electronic file containing information identifying a set of paper-scanned images or processed ESI and indicating where individual pages or files belong together as Documents, including attachments, and where each Document begins and ends. A Load File will also contain data relevant to the individual Documents, including extracted and user-created Metadata, as well as links to OCR or Extracted Text,

should such data be available, and links to Native Files where such files are included in a production.

1.8 “Media” means an object or device, including but not limited to, a disc, tape, external hard drive, computer, or other device, on which data is or was stored.

1.9 “Metadata” means (i) information associated with or about a file that is produced and maintained by the application that generated, edited, or modified such native file which describes the characteristics, origins, or usage or validity of the electronic file; and (ii) information generated automatically by the operation of a computer or other information technology system when a native file is created, modified, transmitted, deleted, saved, or otherwise manipulated by a user of such system.

1.10 “Native Format” means and refers to the file structure of a Document created by the original creating application (in contrast to a Static Image, which is a representation of ESI produced by converting a native file into a standard image format capable of being viewed and printed on standard computer systems, such as .tiff or .pdf).

1.11 “OCR” means optical character recognition technology which is created by software used in conjunction with a scanner that is capable of reading text-based paper/hard copy Documents and making such Documents searchable using appropriate software.

1.12 “Predictive Coding/Technology Assisted Review” shall mean processes for prioritizing or coding a collection of Documents using computerized systems, such as machine-learning algorithms, that may rely on the judgments of one or more attorneys experienced in the subject matter of a litigation regarding the responsiveness of a subset of Documents and extrapolates those judgments to the remaining Document collection. For

purposes of this Protocol, Predictive Coding/Technology Assisted Review is synonymous with computer-assisted review, computer-aided review, and content-based advanced analytics or other terms used to refer to search methodologies that rely on machine-based learning to identify Responsive Documents.

1.13 “Production” or “Produced” includes any exchange of Documents or Electronically Stored Information between the Parties, whether voluntarily or in response to a formal or informal request.

1.14 “Responsive Document” refers to any Document that is responsive to any discovery request or subpoena served on the Producing Party in the Action and which the Producing Party has agreed or been ordered to produce, subject to the limitations set forth in the Federal Rules of Civil Procedure, Court order, and/or any applicable legal privilege or protection.

1.15 “Search Term” means a combination of words and phrases designed to capture potentially relevant ESI, and includes strings of words and phrases joined by proximity and Boolean connectors.

1.16 “Static Image” means or refers to a representation of ESI produced by converting a native file into a standard image format capable of being viewed and printed on standard computer systems. A Tagged Image File Format (TIFF) image is an example of a Static Image.

1.17 “Structured Data” means ESI stored in a structured format, such as databases or data sets according to specific form and content rules as defined by each field of the database.

1.18 “Unstructured Data” refers to free-form data which either does not have a data structure or has a data structure not easily readable by a computer without the use of a specific program designed to interpret the data, such as word processing Documents, slide presentations, Email, and image files.

2. SCOPE

2.1 **General.** The procedures and protocols outlined herein govern the Production of Documents and ESI by all Parties in the Action. The Parties will take reasonable steps to comply with this agreed-upon Protocol. All Productions made pursuant to this Protocol are subject to the Stipulation and Amended Order of Confidentiality entered by the Court on April 27, 2020 (ECF No. 388) (“Confidentiality Order”), and any further agreements, stipulations, protective orders or privilege orders entered in these Proceedings. Nothing in this Protocol is intended to be an exhaustive list of discovery obligations or rights of a Party requested to produce Documents or ESI (“Producing Party”) or a Party requesting Documents or ESI (“Requesting Party”). To the extent additional obligations or rights not addressed in this Protocol arise under the Federal Rules of Civil Procedure, local rules, or applicable state and federal statutes, they shall be controlling.

2.2 There is no presumption under this protocol that any Party must re-process or recollect Documents (including data and metadata fields) that have been processed or collected prior to the date of this Order for use in (i) this Action, (ii) any related action (e.g., *In re Foreign Exchange Benchmark Rates Antitrust Litigation*, Civ. No. 1:13-cv-07789 (LGS) (S.D.N.Y.), *Nypl, et al. v. JPMorgan Chase & Co, et al.*, Civ. No. 1:15-cv-9300 (LGS) (S.D.N.Y.), *Contant, et al. v. Bank of America Corporation, et al.*, Civ. No. 1:17-cv-3139 (LGS) (S.D.N.Y.)) (collectively, the “Related Actions”), or (iii)

investigations concerning the subject matter of this Action. However, to the extent any Party has produced or intends to produce Documents in this Action that originally were collected or produced in other cases or government investigations and that do not comply with the requirements of this Protocol, and metadata for such Documents (as specified in this Protocol) can be produced in whole or in part without undue burden, such metadata shall be produced in the form of an overlay file that contains the Bates number of the document as originally produced and the additional metadata fields. The overlay file should be formatted in the same way as the Concordance data load file described herein. To the extent any Party has produced or intends to produce Documents in this Action that originally were collected or produced in other cases or government investigations and that do not comply with the requirements of this Protocol, and the Producing Party believes it would be unduly burdensome to re-collect or re-process the Documents to comply with the requirements of this Protocol, the parties shall meet and confer to attempt to arrive at a suitable solution. If no informal solution can be reached, the Requesting Party may seek the Court's assistance.

2.3 Limitations and Non-Waiver. The Parties and their attorneys intend by this Protocol to make the mutual disclosures promised herein. The Parties and their attorneys do not intend by this Protocol to waive their rights (or the rights of any regulators) to any protection or privilege, including the attorney-client privilege, the work-product doctrine, and any other privilege or immunity that may be applicable. All Parties and their attorneys are not waiving and specifically preserve their attorney-client privileges, work product protection, and other privileges. The Parties and their attorneys are not waiving, and specifically reserve, the right to object to any discovery request on any grounds. Further, nothing in this Protocol shall be construed to affect the admissibility of Documents

and ESI. All objections to the discoverability or admissibility of any Documents and ESI are preserved and may be asserted at any time. This Order does not impose any obligation to restore backup tapes and similar Media.

2.4 **Reservation of Rights.** For the avoidance of doubt, the inclusion of any platform, program, application, or software in Section 1 as an example is not an admission that such platform, program, application, or software is used by a particular Party or contains relevant information and does not create any independent obligation or commitment to preserve or collect ESI from such platform, program, application, or software. The Parties reserve all rights to object to any demand to collect or produce ESI from any or all of the examples listed in Section 1.

2.5 **Modification by Agreement.** Any practice or procedure set forth herein may be varied by agreement of affected Parties, which will be confirmed in writing, where such variance is deemed appropriate to facilitate the timely and economical exchange of Documents and ESI. Any Party added or joined to any complaint in this Action and any Party to actions that may be consolidated into or coordinated with the above-captioned matter after the date of this Protocol that seeks to deviate from the Protocol set forth herein must obtain leave of Court to do so unless all affected Parties otherwise consent in writing. Before seeking Court intervention, Plaintiffs and all affected Defendants shall meet and confer in good faith regarding any modification.

2.6 **Modification by Court Order.** Nothing in this Protocol waives the right of any Party to petition the Court for an Order modifying its terms upon good cause shown, provided, however, that counsel for such Party must first meet and confer with the counsel

for the opposing Party and the Parties shall use reasonable best efforts to negotiate an exception from or modification to this Order prior to seeking relief from the Court.

3. PRESERVATION

The Parties agree that they shall continue to take reasonable steps to preserve relevant Documents and Electronically Stored Information that may exist, in accordance with their obligations under applicable law. By preserving or producing information for the purpose of this Action, the Parties are not conceding that such material is discoverable, relevant or admissible.

4. PRODUCTION OF STRUCTURED DATA

Where a discovery request requires Production of Structured Data, in lieu of producing Structured Data systems or applications, the Parties shall meet and confer on the content and format of a data extraction from such Structured Data source. The Parties shall discuss and attempt to agree upon the sets of data or fields to be included in the extraction and the format in which data shall be produced. The Parties reserve all rights to object, including but not limited to, objections for relevance, undue burden, and/ or inaccessibility.

5. IDENTIFICATION OF RESPONSIVE DOCUMENTS.

The Parties shall meet and confer in good faith to come to an agreement on search methods used to identify Responsive Documents and ESI, including the identification and disclosure of proposed Search Terms, Custodians from which Documents and ESI will be collected, date ranges that may be applied to filter Documents and ESI, and any other advanced search methodology or Predictive Coding/Technology-Assisted Review platform that a Producing Party may use to identify, filter and produce potentially Responsive Documents and ESI. The Producing Party shall retain the presumptive right and responsibility to manage and control searches of its data files, including the right to use an advanced search methodology or

Technology-Assisted Review Platform and to propose revisions to such methodologies in order to make them more accurate and/or cost-effective.

The fact that a Document or ESI is identified by use of a Search Term or identified as potentially responsive by any other technology used to identify potentially Responsive Documents and ESI shall not prevent any Party from withholding such file from Production on the grounds that the file is not responsive or that it is protected from disclosure by applicable privilege or work-product protection.

6. PRODUCTION OF DOCUMENTS ORIGINATING AS PAPER

6.1 The following Production specifications apply to Documents that existed in paper format prior to Production (“hard copy Documents”). Documents that originated as paper but which were scanned and maintained electronically by a Party prior to inception of this Action shall be produced in accordance with Section 7 of this Protocol. The Parties agree to produce hard copy Documents in the formats described below, to the extent reasonably practicable and not unduly burdensome. These formats are deemed to be Productions in reasonably usable form. If a Producing Party intends to produce any hard copy Documents in any manner other than as specified herein, the Producing Party shall notify the Requesting Party of its intent, including Production format (*e.g.*, produced as paper, made available for inspection). If the proposed Production format is not acceptable to the Requesting Party, the Parties shall meet and confer to determine a mutually acceptable Production format for such Documents.

6.2 **TIFFs.** Documents should be produced as single-page, black and white, group IV TIFFs imaged at 300 dpi. Bates numbers, confidentiality designations (in accordance with the Confidentiality Order governing the case), and redactions (to the

extent they are necessary) should be burned into the image. TIFF image files should be provided in an “Images” folder.

6.3 Unitizing Documents. In scanning paper Documents, Documents maintained as distinct Documents should not be merged into a single record, and single Documents should not be split into multiple records (*i.e.*, paper Documents should be logically unitized). For example, Documents stored in a binder, folder, or similar container (each a “container”) should be produced in the same order as they appear in the container. The front cover of the container should be produced immediately before the first Document in the container. The back cover of the container should be produced immediately after the last Document in the container. The Parties will undertake reasonable efforts to, or have their vendors, logically unitize Documents correctly, and will commit to address situations of improperly unitized Documents to the extent not unduly burdensome.

6.4 Parent-Child Relationships. The Parties agree that if any part of a Document or its attachments is responsive, the entire Document and attachments will be produced, except any attachments that must be withheld or redacted on the basis of any privilege, work-product or other protection. To the extent Documents are maintained as distinct families and parent-child relationships have been preserved, the Parties shall further take reasonable steps to ensure that parent-child relationships within a Document family (the association between an attachment and its parent Document) are preserved to the extent not unduly burdensome, including any attachments to Emails subsumed within an Email thread. The child-Document(s) should be consecutively produced immediately after the parent-Document. Each Document shall be produced with the Production number for the first and last page of that Document in the “BegBates” and “EndBates” fields of the

data Load File and with the “BegAttach” and “EndAttach” fields listing the Production number for the first and last page in the Document family.

6.5 **OCR.** To the extent that Documents that exist in paper or hard copy format have been run through optical character recognition (“OCR”) software, the full text shall be provided on a Document-level in an appropriately formatted text file (.txt) that is named to match the first Bates number of the Document. Parties should use OCR tools that are able to recognize non-English character sets and provide Unicode encoded text files. Text files should be provided in a “Text” folder. To the extent that a Document is redacted, the text files should not contain the text of the redacted portions.

6.6 **Unique IDs.** Each TIFF image should have a unique filename, which corresponds to the Bates number of that page. The filename should not contain any blank spaces and should be zero-padded (*e.g.*, ABC-000001), taking into consideration the estimated number of pages to be produced. If a Bates number or set of Bates numbers is skipped in a Production, the Producing Party will so note in a cover letter or Production log accompanying the Production or as soon as practicable thereafter. Bates numbers will be unique across the entire Production and prefixes will be consistent across all Documents a Party produces in the Action.

6.7 **Data Load Files.** Documents should be provided with an Opticon Cross-Reference File and Concordance data Load File using standard Concordance delimiters:

- (i) Field Separator: ASCII character 20 (“**¶**”);
- (ii) Quote: ASCII character 254 (“**”**”); and
- (iii) New Line: ASCII character 174 (“**®**”).

Concordance-compatible image and data Load Files should be provided in a “Data” folder.

6.8 **Metadata.** Each of the Metadata and coding fields set forth in Appendix A shall be produced for that Document to the extent reasonably available and not unduly burdensome.

6.9 **Color.** Documents containing color need not be produced in color in the first instance, provided however, that the Producing Party shall retain a copy of produced hard copy Documents in color. However, if good cause exists for the Requesting Party to request Production of certain Documents in color, the Requesting Party may request Production of such Documents in color by providing (1) a list of the Bates numbers of Documents it requests to be produced in color format; and (2) an explanation of the need for Production in color format. The Producing Party shall not unreasonably deny such requests.

7. **PRODUCTION FORMAT FOR UNSTRUCTURED ELECTRONICALLY STORED INFORMATION**

7.1 The Parties agree to produce in the formats described below to the extent not unduly burdensome. These formats are deemed to be Productions in reasonably usable form. If any Party contends that particular Documents or ESI warrant a different format, or it is unduly burdensome to produce in the agreed-upon format, the Parties will meet and confer to determine a mutually acceptable Production format for such Documents.

7.2 **TIFFs.** Documents should be produced as single-page, black and white, group IV TIFFs imaged at 300 dpi. The Document’s original orientation should be maintained (*i.e.*, portrait-to-portrait and landscape-to-landscape). Bates numbers, confidentiality designations (in accordance with the Confidentiality Order governing the

case), and redactions (to the extent they are necessary) should be burned into the image. TIFF image files should be provided in an “Images” folder.

7.3 **Extracted Text Files.** The full text of native files should be extracted directly from the native file (not OCR) and should be delivered in an appropriately formatted document level text file (.txt) that is named to match the first Bates number of the Document. Text files should be provided in a “Text” folder. To the extent that a Document is redacted, the Document should undergo OCR after it has been redacted in order to remove the redacted content.

7.4 **Unique IDs.** Each image should have a unique filename, which corresponds to the Bates number of that page. The filename should not contain any blank spaces and should be zero-padded (*e.g.*, ABC-000001), taking into consideration the estimated number of pages to be produced. If a Bates number or set of Bates numbers is skipped in a Production, the Producing Party will so note in a cover letter or Production log accompanying the Production or as soon thereafter as practicable. Bates numbers will be unique across the entire Production and prefixes will be consistent across all Documents a Party produces in this Action.

7.5 **Parent-Child Relationships.** The Parties agree that if any part of a Document or its attachments is responsive, the entire Document and attachments will be produced, except any attachments that must be withheld or redacted on the basis of any privilege or work-product or other protection. The Parties shall further take reasonable steps to ensure that parent-child relationships within a Document family (the association between an attachment and its parent Document) are preserved. The child-Document should be consecutively produced immediately after the parent-Document. Each Document

shall be produced with the Production number for the first and last page of that Document in the “BegBates” and “EndBates” fields of the data Load File and with the “BegAttach” and “EndAttach” fields listing the Production number for the first and last page in the Document family.

7.6 **Metadata.** The Parties agree that Metadata will be produced for all ESI, whether produced in Native Format or Static Image formats, unless unduly burdensome to do so. Appendix A sets forth the minimum Metadata fields that must be produced to the extent that Metadata exists for a particular Document and is reasonably accessible without undue expense. Nothing herein shall require any Party to create or produce Metadata that does not exist or is not reasonably accessible.

7.7 **Production of Documents in Native Format.**

- (i) The processed native for all spreadsheets (*i.e.*, MS Excel, .CSV, or similar), PowerPoint files, and audio, video or multimedia files, excluding redacted documents, should be produced and linked to the database by the Metadata field “NativeLink.”
- (ii) Where native files are produced in lieu of TIFF images, each native file will be assigned a unique Bates number. The Producing Party will produce a placeholder (a single-page TIFF slip sheet indicating that the native item was produced) along with the file itself in Native Format. The placeholder will be branded with the Production number in the lower right hand corner and the phrase “PRODUCED IN NATIVE ONLY” branded in the center of the

page. The Producing Party will also brand any confidentiality or similar endorsements in the lower left hand corner of the placeholder in no less than 10-point font.

- (iii) To the extent that a native spreadsheet or PowerPoint file must be redacted, the Producing Party may elect to either redact the native file or produce TIFF images with burned in redactions in lieu of a Native File and TIFF placeholder image. If redacting TIFF images and to the extent that any of the following can be automated, the Producing Party, or its ediscovery vendor, should make reasonable efforts to: (1) reveal hidden rows, columns, sheets, speaker's notes, or slides prior to converting the Document to TIFF; (2) clear any filters that may conceal information; (3) adjust column widths so that numbers do not appear as "#####", (4) ensure that column and row headings print; (5) ensure that the tab name appears in the header or footer of the Document; (6) process comments so that they are produced at the end of the spreadsheet; and (7) process spreadsheets so that they print across, then down. If good cause exists, the Requesting Party may ask the Producing Party to manually undertake the foregoing for certain Documents identified by Bates number by the Requesting Party to the extent the Document was originally produced with concealed information. The Producing Party shall not unreasonably deny such a request.

- (iv) To the extent that audio, video or multimedia files must be redacted, the Producing Party may use industry acceptable software to implement native redactions. Additionally, the Parties may meet and confer regarding how to implement redactions while ensuring that proper formatting and usability are maintained.
- (v) Files produced in Native Format shall be given file names identical to the Document Number.
- (vi) The Requesting Party may ask for certain other ESI initially produced in TIFF format to be produced in their Native Format in the event that the TIFF format is not reasonably usable. The Requesting Party shall identify the documents by their Bates numbers and the documents should be produced in their unaltered Native Format.

7.8 **Track Changes and Comments.** To the extent that a Document or ESI has comments or changes tracked, reasonable efforts should be made to image the Document or ESI showing tracked changes and comments.

7.9 **Password Protected Files.** The Parties will make reasonable efforts to ensure that all encrypted or password-protected Documents and ESI are successfully processed for review and Production in a manner that allows such Documents and ESI to be accessed and reviewed by the Requesting Party. To the extent encrypted or password-protected Documents are successfully processed, the Parties have no duty to identify further the prior encrypted status of such Documents. To the extent such Documents are

not successfully processed despite use of reasonable efforts, a placeholder TIFF image may be produced in place of each such Document indicating that security protection could not be removed, so long as a slipsheet is provided flagging to the Requesting Party that the security protection could not be removed. Upon request from the Requesting Party, the Parties shall meet and confer in good faith regarding reasonable efforts or mechanisms to remove such security protection or the Production of available Metadata.

7.10 Embedded Documents. A Producing Party may exclude non-substantive embedded files (*e.g.*, company logos, signature blocks) from Production. Substantive embedded files (*e.g.*, Word or PDF Documents embedded in Excel spreadsheets) in Responsive Documents shall be extracted during processing and produced as separate, attached Documents, within the same family as the Document from which they were extracted and maintaining the family relationship. To the extent that extracting substantive embedded files from a parent-Document would be unduly burdensome, a Producing Party may instead produce the parent-Document in Native Format with accessible embedded files.

7.11 Data Load Files. Documents should be provided with an Opticon Cross-Reference File and Concordance data load file using standard Concordance delimiters:

- (i) Text Delimiter AKA “Quote” — “p”, Hex (FE), Unicode (U+00FE), Decimal (254) 2;
- (ii) Field Separator AKA “Comma” — “¶”, Hex (14), ASCII character 20 (“¶”);
- (iii) Unicode (U+0014), Decimal (20);

(iv) Quote: ASCII character 254 (“p”); and

(v) New Line: ASCII character 174 (“®”).

All rows will contain the same number of delimiters and fields. The multi-value field delimiter must be consistent across all fields. For example, if the CC field contains semi-colons between Email addresses, the Tag field should also contain semi-colons. Concordance-compatible image and data load files should be provided in a “Data” folder. Parties have the option to exchange sample load files. If this exchange occurs, the Requesting Party will have 14 days to respond with Load File change requests. Nothing in this Order will limit the Parties from discussing Load File changes throughout the course of the Action.

7.12 Deduplication. To the extent not unduly burdensome, a Producing Party shall globally deduplicate by exact duplicate families by identifying (i) exact hash duplicates; (ii) for Instant Message files, where the values in the following metadata fields match exactly: (1) Chat RoomID/PCHAT Number/InstmgID, (2) Conversation start date and time, (3) Conversation end date and time, and (4) Participant Count /Number of Participants; or (iii) for Instant Message files, an event entry by event entry deduplication where the event text as well as the values in the following metadata fields match exactly: (1) Chat RoomID/PCHAT Number/InstmgID, (2) Event participant, (3) Event date/timestamp, and (4) Type of event. The Producing Party shall identify the additional Custodians in an AllCustodian Metadata field. To the extent available, an Email that includes content in the BCC or other blind copy fields shall not be treated as a duplicate of an Email that does not include content in the BCC or other blind copy field, even if all remaining content in the Email is identical. Any Party opting to deduplicate in a different

manner from the foregoing procedure shall disclose their deduplication methodology to the Requesting Party prior to deduplication. If the Requesting Party objects to the methodology, it shall timely raise those concerns with the Producing Party. If a Party opts not to deduplicate, it shall disclose such fact to the Requesting Party prior to Production of such non-deduplicated data.

7.13 Production of Audio, Video and Multimedia Recordings. The Parties shall meet and confer to determine a mutually agreeable format for producing audio, video and multimedia files.

7.14 Production of Transcripts. If deposition or other transcripts are responsive, the Parties should meet and confer to determine a mutually agreeable format for producing the transcripts.

7.15 Custodian or Originating Source. The Custodian or originating source shall be identified in the Custodian field of the database load files unless unduly burdensome to do so. Documents found in the possession of a natural person (or on a natural person's hardware or storage Media) should be produced in such fashion as to identify the natural person. Documents found in the possession of a department, group, entity, or other common facility (*e.g.*, office, file room, archive, network storage, file share, back-up, etc.) should be produced in such a fashion as to identify the department, group, entity, or facility, to the extent not unduly burdensome to do so. A Producing Party shall use a uniform description of a particular Custodian across Productions.

7.16 Color. Documents not produced in Native Format containing color need not be produced in color in the first instance. However, if good cause exists for the Requesting

Party to request Production of certain Documents in color, the Requesting Party may request Production of such Documents in color by providing (1) a list of the Bates numbers of Documents it requests to be produced in color format; and (2) an explanation of the need for Production in color format. The Producing Party shall not unreasonably deny such requests.

7.17 **Foreign Language.** Foreign language text files and Metadata should be delivered with the correct encoding to enable the preservation of the Document's original language.

7.18 **Date Format.**

- (i) Dates and times may be concatenated into a single field, with a format of MM/dd/YYYY HH:MM:ss (zzz).
- (ii) If a time is not available, such as the estimate date for a coded Document, then 12:00 am, or 00:00:00 should be assigned, *i.e.*, 12/21/1999 00:00:00.
- (iii) Date delimiters, such as slashes and colons, must be consistent across all fields. In the format of MM/dd/YYYY, there are no spaces and only forward slashes.
- (iv) Date formats must be consistent within any one field.
- (v) Date formats must be consistent across all fields, *i.e.*, a record with a sent date should have the same format in the last modified date field.

The Producing Parties shall make reasonable efforts to process all ESI using Eastern Standard Time (“EST”) or Universal Time Coordinate (“UTC”)/Greenwich Mean Time (“GMT”), and shall disclose which time zone was used. No Party will be required to re-process any ESI that has been processed prior to the date of this Order for purposes of complying with this provision.

7.19 **Production Media.** The preferred means of producing Documents is via secure FTP or secure file share. However, Documents may also be produced via encrypted flash drive, or encrypted hard drive, or encrypted CD or DVD. To the extent possible, physical Media should be protected before it is produced.

7.20 **Naming Convention for Production Media.** Whether produced via secure FTP, file share, or physical Media, the files produced should be combined into a compressed file such as .zip, .rar, etc. The compressed file should be named so as to indicate Producing Party, the date of the Production, and the sequence of the Production. If the Production is made using physical Media, the Media should be labeled to include (a) text referencing that it was produced in the Action; and (b) the Bates number range of the materials contained on the Media.

7.21 **Replacement Productions.** Any replacement Production will be transmitted with a cover letter or email to identify the Production as a replacement and cross-reference the BegBates and EndBates of the Documents being replaced. If the replacement Production is being transmitted by physical Media, the Media shall include the phrase “Replacement Production.”

7.22 **Encrypted Data.** To the extent a Production is encrypted before it is produced, the Producing Party shall contemporaneously transmit the credentials necessary to decrypt the data.

8. **ASSERTIONS OF PRIVILEGE**

8.1 The Parties agree to exchange privilege logs containing the information called for by Local Rule 26.2 and Federal Rule of Civil Procedure 26(b)(5), except as otherwise provided below. In an effort to avoid unnecessary expense and burden, the Parties agree that, for documents redacted or withheld from production on the basis of attorney-client privilege, work product doctrine and/or any other applicable privilege or protection, the Producing Party will prepare (i) a categorical privilege log as described by Local Rule 26.2(c), with the form and contents to be negotiated by the parties, together with (ii) a summary metadata log containing, for each document (except those exempted below) claimed as privileged and for which there is metadata that can be extracted without undue burden, an export of all or a subset of the metadata fields listed below (as agreed upon by the Parties) to the extent such information exists and has not been redacted for privilege. The export shall be in Excel format or any other format that permits electronic sorting and searching and should include the following information, to the extent applicable and practicable, from the top-line email:

- (i) Privilege log entry number
- (ii) BEGBATES (if Redacted)
- (iii) ENDBATES (if Redacted)
- (iv) BEGBATESATTACH (if Redacted)
- (v) ENDBATESATTACH (if Redacted)
- (vi) CUSTODIAN

- (vii) FROM
- (viii) TO
- (ix) CC
- (x) BCC
- (xi) DOCTYPE
- (xii) SUBJECT
- (xiii) SENTDATE
- (xiv) FILENAME
- (xv) AUTHOR
- (xvi) MD5 HASH
- (xvii) INTMSGID/Chatroom ID/PCHAT Number (if available for Bloomberg chats)
- (xviii) TIME_ZONE
- (xix) PRIV_TYPE

8.2 If a Party requires further information to evaluate a claim of privilege, it shall explain with specificity in writing the need for such information. Within fourteen (14) days of such request, the Producing Party must either (i) provide the requested information or (ii) challenge the request. If a Party challenges a request for further information, the Parties shall meet and confer to try to reach a mutually agreeable solution within fourteen (14) days of any such challenge and prior to seeking any relief from the Court.

8.3 The Parties agree to the following provisions in relation to identifying Documents and ESI on privilege logs.

(A) Excluded categories and general cutoff dates for Defendants: Subject to Section 8.3(D) below, Defendants need not identify on a privilege log (i) communications to or from outside legal counsel for any Defendant, (ii) communications with inside counsel for any Defendant, or (iii) work product prepared by or at the instruction of counsel for any Defendant, in each case after (a) the Defendant or any of its affiliates was named as a party to *In re Foreign Exchange Benchmark Rates Antitrust Litigation*, Civ. No. 1:13-cv-07789 (LGS) (S.D.N.Y.), or (b) December 31, 2013, whichever is earlier.

(B) Excluded categories and general cutoff date for Plaintiffs: Subject to Section 8.3(D) below, Plaintiffs need not identify on a privilege log (i) communications to or from outside legal counsel for any Plaintiff, (ii) communications with inside counsel for any Plaintiff, or (iii) work product prepared by or at the instruction of counsel for any Plaintiff, in each case after December 31, 2013.

(C) Litigation holds: A party need not identify on a privilege log any communications regarding litigation holds or preservation, collection, or review of Documents in the Action or in any litigation or related investigation, including, but not limited to, the Related Actions, unless a party demonstrates good cause for requiring such communications to be logged.

(D) Post-2013 documents: Notwithstanding the general cutoff dates set forth above in Sections 8.3(A) and (B), the parties reserve the right to serve requests for specific categories of documents or communications created after 2013 and to seek a privilege log for any documents withheld on the basis of privilege or work product in response to such requests. The parties also reserve the right to object to such requests and logging, and may

present any disputes in relation to such requests or accompanying privilege logs to the Court.

8.4 To the extent any Party has or intends to produce a privilege log in this Action that was originally prepared for another other case or government investigation, such privilege log does not comply with the requirements of this Protocol, and the Party believes it would be unduly burdensome to do so, the parties shall meet and confer to attempt to arrive at a suitable solution. If no informal solution can be reached, the Requesting Party may seek the Court's assistance. The burden shall be on the Party claiming undue burden to establish such burden.

9. OTHER REDACTIONS

9.1 The Parties may apply redactions to information where required by foreign data privacy, bank secrecy, state secrecy or other similar laws. In advance of making any such redactions, the Parties will meet and confer to attempt to reach agreement as to (a) the circumstances in which such redactions will be made; and (b) a protocol for the identification of the reason for each redaction, which need not be separately logged. To the extent agreement cannot be reached, a Party may raise the issue with the Court. To the extent a Party has produced or intends to produce documents that were originally processed or collected for another case or government investigation, and did not identify or otherwise track the reasons for any redactions made in such documents, the Parties will meet and confer about what information is reasonably available about the basis for the prior redactions.

10. COST ALLOCATION

10.1 Pursuant to Federal Rule of Civil Procedure 26, the Parties generally presume that the Producing Party bears all costs of preservation, retrieval, and Production of its reasonably accessible ESI, and there may be cost-sharing or cost-shifting upon agreement of the Producing and Requesting Parties or upon proper motion and Order of the Court, as to ESI that is not reasonably accessible.

11. THIRD PARTY DOCUMENTS

11.1 A Party that issues a non-party subpoena (“Issuing Party”) shall include a copy of this Protocol with the subpoena and state that the Parties to the Action have requested that third parties produce Documents in accordance with the specifications set forth herein. Within five business days of receipt, the Issuing Party shall provide copies of such Productions to all other Parties in the format in which they were received from the third party. Nothing in this Protocol is intended to or should be interpreted as narrowing, expanding, or otherwise affecting the rights of the Parties or third parties to object to a subpoena.

12. AUTHENTICATION

12.1 The Parties will meet and confer regarding an authentication stipulation concerning Documents produced in this Action.

SO STIPULATED.

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³ Linklaters LLP does not represent Société Générale or SG Americas Securities, LLC with respect to claims by BlackRock, Inc. or the BlackRock-related entities listed in Appendix C of the Complaint.

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SO ORDERED.

Dated: July 30, 2020	 Hon. Stewart D. Aaron United States Magistrate Judge
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⁴ Eversheds Sutherland (US) LLP only represents Standard Chartered Bank with respect to claims by AllianzGI GmbH, the Allianz Entities, PIMCO, and the PIMCO Funds, all as defined in the Complaint.

APPENDIX A: REQUIRED METADATA FIELDS

Field	Description	Email	Instant Message (chats/texts/SMS)	Non- Email ESI	Hard Copy
BEGBATES	Beginning page Bates number	x	x	x	x
ENDBATES	Ending page Bates number	x	x	x	x
BEG_ATTACH	Beginning page of attachment range	x	x	x	x (where readily available)
END_ATTACH	Ending page of attachment range	x	x	x	x (where readily available)
AllCustodian	Production custodians or non-human Production data sources associated with the produced Document	x	x	x	x
File Name	File name of Document			x	
File Extension	File extension of Document			x	
Page Count	For Documents produced in TIFF form, number of pages in the Document. For Documents produced in native, page count will be 1 (for placeholder).	x	x	x (other than native files)	x
Subject	Subject of Email / Instant Message	x	x		
Author	Author field extracted from the Metadata of a non-Email Document			x	
From	Author/Sender	x	x		
To	Recipients/Participants	x	x		
CC	Coppyees	x	x		
BCC	Blind copyees	x	x		
Title	Title Field extracted from the Metadata of a non-Email Document.			x	
Date /Time Sent	Date sent (mm/dd/yyyy hh:mm:ss format)	x	x		

Field	Description	Email	Instant Message (chats/texts/SMS)	Non- Email ESI	Hard Copy
Date/Time LastModified	Last modification date/time (mm/dd/yyyy format)			x	
Hash Value (MD5 or SHA-1)	Unique electronic signature of Email or electronic file	x	x	x	
Email Thread Family ID (if available and if Email threading is used by Producing Party)	Unique identifier from Email threading algorithm to denote Emails from a single thread and all attachments	x	x		
Production Volume	Production volume name	x	x	x	x
Confidentiality	Confidentiality designation pursuant to the Confidentiality Order	x	x	x	x
Redacted	Descriptor for Documents that have been redacted (<yes> or <no>)	x	x	x	x
Text Path	Path of text file	x	x	x	x
Native Path	Path of native file			x	
Chat RoomID/PCHAT Number/InstmgID (if available)	Internet Message ID that can be used to identify chat room		x		
Time Zone	Time zone used for data processing	x	x	x	

The Parties agree that with respect to the above-referenced Metadata fields that there is no obligation for a Producing Party to rename Metadata fields as long as all fields above are accounted for (if applicable).